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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,404	09/22/2003	Franciscus Bernardus Maria Van Bilsen	081468-0305376	4408
909	7590	02/08/2006	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN, LLP			ALLEN, STEPHONE B	
P.O. BOX 10500			ART UNIT	PAPER NUMBER
MCLEAN, VA 22102			2878	

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/665,404	Applicant(s) VAN BILSEN ET AL.	
	Examiner Stephone B. Allen	Art Unit 2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-202 is/are pending in the application.
- 4a) Of the above claim(s) 76-116 and 184-202 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-60,63-68,117-145,148,149,151-183 and 202 is/are rejected.
- 7) ☒ Claim(s) 3,4,61-63,69-75,146-147 and 150 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Examiner acknowledges receipt of the election of the group I invention, without traverse, filed 21 November 2005. After further consideration, examiner has found that the grouping of the claims should be changed as follows:

I. Claims 1-75, 117-183, and 202, drawn to alignment system for lithographic apparatus, classified in class 700, subclass 114.

II. Claims 76-78, drawn to method aligning a work piece for manufacturing of a micro device, classified in class 355, subclass 53.

III. Claims 79-84, drawn to alignment for use in manufacture of micro device, classified in class 356, subclass 400.

IV. Claims 85-116, drawn to method of automatic process control for the manufacture, classified in class 355, subclass 55.

V. Claims 184-201, drawn to metrology system for a lithographic apparatus, classified in class 356, subclass 601.

Because of the change in grouping, the claims elected in the group I invention will be claims 1-75, 117-183 and 202. Claims 76-116 and 184-201 have been withdrawn from further consideration.

Claim Objections

Applicant is advised that should claims 1-12, 17-31 be found allowable, claims 117-143 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after

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allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Applicant is advised that should claims 32-43 and 48-62 be found allowable, claims 145-170 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Applicant is advised that should claims 63-75 be found allowable, claims 171-183 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 2, 5-60, 63-68, 117-145, 148, 149, 151-183 and 202 are rejected under 35 U.S.C. 102(a) as being anticipated by Nomura et al. (2002/0021434) hereinafter referred to as Nomura.

With respect to claims 1, 2, 5-60, 117-145, 148, 149, 151-170 and 202, Nomura discloses an alignment system for a lithographic apparatus, comprising a source of alignment radiation; a detection system comprising a first detector channel and a second detector channel; and a position determining unit in communication with said detection system, wherein said position determining unit is constructed to process information from said first and second detector channels in a combination to determine a position of an alignment mark on a work piece, said combination taking into account a manufacturing process of said work piece; wherein said first detector channel is a first non-zero-diffraction-order channel, and said second detector channel is a second non-zero-diffraction-order channel; wherein said position determining unit is constructed to process information from said first and second detector channels in a combination to determine a position of said alignment mark on said work piece with a first precision; wherein said position determining unit is constructed to process information from third and fourth detector channels to determine a position of said alignment mark on said work piece with a second precision that is more precise than said first precision; wherein said position determining unit is constructed to determine said position of said alignment mark by a predictive recipe using said combined information from said first and second detector channels (paragraphs 75-108).

With respect to claims 63-68, 171-183, the method claimed is inherent to the alignment system.

Allowable Subject Matter

Claims 3, 4, 61, 63, 69-75, 146-147 and 150 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephone B. Allen whose telephone number is 571-272-2434. The examiner can normally be reached on M-F 08:30-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Stephone B Allen
Primary Examiner
Art Unit 2878